March, 2003

RESEARCH PROPOSAL CURRENTLY UNDER DEVELOPMENT

The research outlined below is based on Expressions of Interest received by, and feedback from, the Sustainable Irrigation Program Management Committee. It may not precisely describe the final project agreement, particularly in terms of final project design, cash and inkind contributions.

Goulburn-Broken Irrigation Futures

Assessing and planning sustainable development opportunities

Principal Investigator	Dr. QJ Wang, Principal Scientist Soil & Water, Dept Primary Industries Tatura 3616 email qj.wang@nre.vic.gov.au
Host Organisation	Dept. of Primary Industries Attwood Vic
Issue or Problem to be Addressed	Irrigation is fundamental important to the regional economy in Goulburn-Broken catchment. The regional farm gate gross value of production from irrigated agriculture in 2000 was $1.35 billion. Investment in on-farm and processing infrastructure is about $100 million per annum. Irrigation is facing major challenges. As one of the oldest gravity irrigation systems in Australia, the Goulburn irrigation system needs substantial renewal of its ageing infrastructure assets in the next 20 years. Initiatives to increase environmental allocations and flow regimens will have also a major impact on irrigation. * These challenges present a major opportunity for the region to plan and effect changes to ensure a prosperous future. For example, there is the opportunity to fine tune and redesign the irrigation systems and land use, to better match with land capability. * As a first step, there is a need to have a process to bring together community and other stakeholders, supported by the best scientific knowledge available, to develop a shared vision for irrigation futures for the catchment.
Objectives	• Facilitate key stakeholders to develop a shared vision on the irrigation futures of the Goulburn-Broken catchment, identifying major constraints and desired outcomes, and exploring future options • Develop an understanding of the integrated biophysical, economic and social system to investigate consequences of various regional options under different scenarios of external constraints • Provide a framework to integrate knowledge, guide future research, and for ongoing review of the vision
Comment	The project was valued for its potential to enhance the sustainability of irrigation, to inform public policy, and to explore visions and values. The project will participate as a case study region in another Sustainable Irrigation Program project – "Economic Benefits of Irrigation to national and regional economies". It is expected that this will assist the investigation and provide a firm economic basis for evaluating options. The project will also work collaboratively with a similar catchment scale project to be developed in Harvey, W.A.
Research Timeline	Stage one completed by October 2003, Stage two by July 2006
Proposed Funding	Funding from the Sustainable Irrigation Program will not exceed $600,000 in total. Final project budget forecast at least $1.7 M